

**REMARKS**

Applicants have reviewed the Office Action of April 21, 2005. Claims 1, 8, 10, 20, and 29-31 have been amended. Claims 14, 15, and 27 have been cancelled. Claims 1-5, 7-13, 16-26, and 28-35 remain pending. Applicants request reconsideration of the application.

This application contains independent claims 1, 8, 10, 20, 25, 27, 29, and 31. Applicants will generally refer to these claims when traversing rejections.

**A. The claims are not anticipated by Blondin.**

Claims 10-12, 15-17, 20, and 22 were rejected under 35 U.S.C. 102(b) as anticipated by Blondin (US 4,808,517). This rejection encompasses independent claims 10 and 20. Applicants traverse the rejection.

The Examiner points to Blondin's use of submitochondrial particles as meeting the "oxygen scavenging membrane fragments" limitation. Claims 10 and 20 have been amended to recite that those membrane fragments are derived from the cytoplasmic membranes of bacteria or *E. coli*. Blondin's submitochondrial particles are not bacterial; see col. 2, ll. 2-12. Therefore, Blondin does not anticipate the instant claims. Applicants request withdrawal of the 102(b) rejection based on Blondin.

**B. The claims are not obvious over Merad and Adler.**

Claims 1-35 were rejected under 35 U.S.C. 103(a) as unpatentable over Merad in view of Adler. Applicants traverse the rejection.

There is no motivation to combine the references. Please note that all of the independent claims recite that the oxygen scavenging membrane fragment is derived from the respiratory system of an organism normally sensitive to azide. However, Merad uses Anaerocult P or Gaz-Pack packets to create his anaerobic environment. This is important because these packets use an inorganic material which is not sensitive to azide at all. A safety data sheet for Anaerocult P is attached to support this statement. It is known that *E. coli* is sensitive to azide. One skilled in the art would be motivated not to combine Merad and Adler because he would expect that azide would kill the membrane fragments of Adler.

so that an anaerobic environment would not be formed. In other words, the instant claims are contrary to accepted wisdom in the art. MPEP § 2145(X)(D)(3). The specification explains this on page 10, ll. 1-14.

Note that Merad and Adler have different principles of operation. Merad kills facultative microbes with azide, whereas Adler promotes the growth of anaerobes by removing oxygen. The Examiner's statement that "it is obvious to combine two compositions, each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for that very same purpose" does not apply when the prior art also teaches that the two compositions should not be combined. Here, the prior art would have taught that the proposed modification would render both prior art references unsuitable for their intended purpose because it would be expected that azide would kill the membrane fragments. In this sense, the prior art also teaches away from combining the references.

Applicants submit that the Examiner's conclusion of obviousness is based on improper hindsight reasoning. In particular, the Examiner has not shown that it was known in the prior art that membrane fragments derived from *E. coli* are resistant to poisons that kill *E. coli*. This is knowledge "gleaned only from applicant's disclosure" on page 10, ll. 8-18 and is improper. MPEP § 2145(X)(D)(); *In re McLaughlin*.

Alternatively, there is no reasonable expectation of success because the prior art would teach a person skilled in the art to expect the membrane fragments to be poisoned by azide. Please note that Merad does not teach that membrane fragments could have been used instead and Adler does not teach that membrane fragments are resistant to azide. Therefore, the claims are not obvious based on Merad and Adler.

With regard to method claim 8, please note that Merad provides an agar-based medium, not a liquid medium, with which he isolates an anaerobic microorganism. Claim 8 is directed purely towards use of a liquid medium. Neither Merad nor Adler teaches the use of a liquid medium. Claim 8 is also non-obvious for this additional reason.

Method claims 29 and 31 have been amended to recite steps wherein the sample is put in a liquid broth, then onto an agar plate, wherein both the liquid broth and agar plate have inhibitor. The specification, at the paragraph beginning on page 10, line 22, teaches the importance of this two-step process and why it is better than placing the sample directly

on the plate as Merad does. Note that Merad does not place inhibitor in his broth, only his agar plate. Adler does not correct these deficiencies. Therefore, these claims are not obvious for this additional reason.

For these reasons, Applicants request withdrawal of the 103(a) rejection based on Merad and Adler.

**C. The claims are not obvious over Merad and Copeland.**

Claims 1-35 were rejected under 35 U.S.C. 103(a) as obvious over Merad and Copeland (US 5,830,746). Applicants traverse the rejection.

The combination of Merad and Copeland does not render the instant claims obvious for the same reasons given above. Again, the Examiner cites Copeland solely for the use of membrane fragments. Copeland also does not teach that membrane fragments are resistant to azide. Therefore, the claims are not rendered obvious.

Claims 10, 20, 25, and 28 all teach the use of a hydrogen donating substance. Neither reference discloses this claim limitation. Claims 10-23, 25, and 28 are non-obvious for this additional reason.

Method claims 8, 29, and 31 all teach the use of an inhibitor in the liquid broth. Neither reference discloses this claim limitation. Claims 8 and 29-35 are non-obvious for this additional reason.

For these reasons, Applicants request withdrawal of the 103(a) rejection based on Merad and Copeland.

**D. The claims are not obvious over Merad and Fung.**

Claims 1-35 were rejected under 35 U.S.C. 103(a) as obvious over Merad and Fung (US 5,405,773). Applicants traverse the rejection.

The combination of Merad and Fung does not render the instant claims obvious for the same reasons given above. Again, the Examiner cites Fung solely for the use of membrane fragments. Fung also does not teach that membrane fragments are resistant to azide. Therefore, the claims are not rendered obvious.

Claims 10, 20, 25, and 28 all teach the use of a hydrogen donating substance. Neither reference discloses this claim limitation. Claims 10-23, 25, and 28 are non-obvious for this additional reason.

Method claims 8, 29, and 31 all teach the use of an inhibitor in the liquid broth. Neither reference discloses this claim limitation. Claims 8 and 29-35 are non-obvious for this additional reason.

Fung also teaches away from the use of an inhibitor because he is trying to encourage the growth of the facultative pathogen *L. monocytogenes*. See the abstract.

For these reasons, Applicants request withdrawal of the 103(a) rejection based on Merad and Fung.

**E. Other changes are made for clarification.**

In claim 1, a misspelled word was corrected.

In claim 8, the word "liquid" was added to some of the steps for consistency.

In claim 30, the only change made was that the extra step recited in that claim was changed from "d" to "f".

Applicants take the position that these changes were made solely to clarify the meaning of the claims and were not made for reasons of patentability. They do not change the scope of the claims.

**CONCLUSION**

In view of the above amendments and comments, Applicants submit the pending claims (1-5, 7-13, 16-26, and 28-35) are in condition for allowance. Withdrawal of the rejections and issuance of a Notice of Allowance is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, she is hereby authorized to call Richard M. Klein at telephone number 216-861-5582, Cleveland, Ohio.

Respectfully submitted,

FAY, SHARPE, FAGAN,  
MINNICH & McKEE, LLP

August 5, 2005

Date



Richard M. Klein  
Reg. No. 33,000  
1100 Superior Avenue  
7<sup>th</sup> Floor  
Cleveland, Ohio 44114-2579  
(216) 861-5582

N:\OXRZ\200025\US\GXH0000142\V001.doc